

CPC**COOPERATIVE PATENT CLASSIFICATION****E01D**

**CONSTRUCTION OF BRIDGES, { ELEVATED ROADWAYS } OR VIADUCTS
ASSEMBLY OF BRIDGES** (bridges extending between terminal buildings and aircraft for embarking or disembarking passengers [B64F 1/305](#); { tracks for special kinds of railways [E01B 25/00](#); culverts [E01F 5/005](#) })

Guide heading:

E01D 1/00 **Bridges in general** (characterised by their structural type [E01D 4/00](#) to [E01D 15/00](#))

[E01D 1/005](#) . {Bowstring bridges (truss-type bowstring bridges [E01D 6/02](#)) }

E01D 2/00 **Bridges characterised by the cross-section of their bearing spanning structure**

[E01D 2/02](#) . of the I-girder type

[E01D 2/04](#) . of the box-girder type

E01D 4/00 **Arch-type bridges**

E01D 6/00 **Truss-type bridges**

[E01D 6/02](#) . of bowstring type

E01D 11/00 **Suspension or cable-stayed bridges**

[E01D 11/02](#) . Suspension bridges

[E01D 11/04](#) . Cable-stayed bridges

E01D 12/00 **Bridges characterised by a combination of structures not covered as a whole by a single one of groups [E01D 2/00](#) to [E01D 11/00](#)**

E01D 15/00 **Movable or portable bridges**
Floating bridges

[E01D 15/005](#) . {Movable bridges in general (floating bridges with sections movable to allow passing of water-borne traffic [E01D 15/145](#); lock gates [E02B 7/20](#)) ; Constructional elements peculiar to movable bridges }

[E01D 15/02](#) . Vertical lift bridges

[E01D 15/04](#) . Swing bridges

- E01D 15/06
 - . Bascule bridges
 - Roller bascule bridges, e.g. of Scherzer type
- E01D 15/08
 - .. Drawbridges
- E01D 15/10
 - . Travelling bridges {i.e. roller bridges }
 - Sliding bridges
 - Rotary cylinder bridges, i.e. rotating about longitudinal axis to invert and raise the road
- E01D 15/12
 - . Portable or sectional bridges (floating bridges [E01D 15/14](#))
- E01D 15/122
 - .. {Inflatable or unreelable bridges (inflatable or unreelable girders in general [E04C 3/00B](#)) ; Bridges with main load-supporting structure consisting only of non-rigid elements, e.g. cables }
- E01D 15/124
 - .. {Folding or telescopic bridges; Bridges built up from folding or telescopic sections ([E01D 15/122](#), [E01D 15/127](#) take precedence; folding or telescopic girders in general [E04C 3/005](#)) }
- E01D 15/127
 - .. combined with ground-supported vehicles for the transport, handling or placing of such bridges or of sections thereof
- E01D 15/133
 - .. built-up from readily separable standardised sections or elements, e.g. Bailey bridges ([E01D 15/127](#) takes precedence)
- E01D 15/14
 - . Floating bridges, e.g. pontoon bridges (landing bridges [E01D 15/24](#); floating bodies or pontoons [B63B](#))
- E01D 15/145
 - .. {displaceable or with sections movable to allow passing of water-borne traffic (movable bridges actuated by floating bodies [E01D 15/005](#) to [E01D 15/10](#)) }
- E01D 15/20
 - .. collapsible, expandable, inflatable or the like {with main load supporting structure consisting only of non-rigid members } ([E01D 15/22](#) takes precedence)
- E01D 15/22
 - .. designed as, or mounted on, vehicles
- E01D 15/24
 - . Bridges or similar structures, based on land or on a fixed structure and designed to give access to ships or other floating structures ([arrangement of ship-based ramps B63B 27/14](#); [loading ramps B65G 69/28](#))
- E01D 18/00**

Bridges specially adapted for particular applications or functions not provided for elsewhere, e.g. aqueducts, bridges for supporting pipe-lines
- E01D 19/00**

Structural or constructional details of bridges
- E01D 19/005
 - . {Piers, trestles, bearings, expansion joints or parapets specially adapted for portable or sectional bridges }
- E01D 19/02
 - . Piers { ([E01D 19/005](#) takes precedence; towers for suspension bridges [E01D 19/14](#)) }
Abutments ([foundations E02D](#)) ; {Protecting same against drifting ice (against colliding vehicles [E01F 15/00](#)) }
- E01D 19/04
 - . Bearings { ([E01D 19/005](#) takes precedence; specially for movable bridges [E01D 15/005](#) to [E01D 15/10](#)) }
Hinges
- E01D 19/041
 - .. {Elastomeric bearings ([E01D 19/048](#) takes precedence) }
- E01D 19/042
 - .. {Mechanical bearings ([E01D 19/048](#) takes precedence) }

- E01D 19/043 ... {Roller bearings }
- E01D 19/045 ... {Line and point rocker bearings }
- E01D 19/046 ... {Spherical bearings }
- E01D 19/047 ... {Pot bearings }
- E01D 19/048 .. {Bearings being adjustable once installed; Bearings used in incremental launching }

- E01D 19/06 . Arrangement, construction or bridging of expansion joints ({[E01D 19/005](#) takes precedence; in movable bridges [E01D 15/005](#) to [E01D 15/10](#) } ; sealing joints not restricted to expansion joints for bridges [E04B 1/68](#))
- E01D 19/062 .. {Joints having intermediate beams }
- E01D 19/065 .. {Joints having sliding plates }
- E01D 19/067 .. {Flat continuous joints cast in situ }

- E01D 19/08 . Damp-proof or other insulating layers
Drainage arrangements or devices {Bridge deck surfacings (bridge decks per se [E01D 19/125](#)) }
- E01D 19/083 .. {Waterproofing of bridge decks; Other insulations for bridges, e.g. thermal (insulation for buildings in general [E04B 1/62](#)) ; Bridge deck surfacings (road surfacings in general [E01C](#)) }
- E01D 19/086 .. {Drainage arrangements or devices (surface drainage of roads in general [E01C 11/224](#); roof drainage [E04D 13/04](#)) }

- E01D 19/10 . Railings
Protectors against smoke or gases, e.g. of locomotives
Maintenance travellers
Fastening of pipes or cables to bridges ({pipe-line bridges [E01D 18/00](#) } ; supports for pipes, cables or protective tubing, e.g. hangers, holders, clamps, cleats, clips, brackets, [F16L 3/00](#))
- E01D 19/103 .. {Parapets, railings ([E01D 19/005](#) takes precedence; balustrades in general [E04F 11/18](#)) ; Guard barriers or road-bridges (in general [E01F 15/00](#)) }
- E01D 19/106 .. {Movable inspection or maintenance platforms, e.g. travelling scaffolding or vehicles specially designed to provide access to the undersides of bridges (lifting devices for movable platforms on vehicles in general [B66F 11/04](#)) }

- E01D 19/12 . Grating or flooring for bridges
Fastening railway sleepers or tracks to bridges (sleepers [E01B 3/00](#))
- E01D 19/125 .. {Grating or flooring for bridges (waterproofing thereof [E01D 19/083](#); floors in general [E04B 5/00](#)) }

- E01D 19/14 . Towers
Anchors; {Connection of cables to bridge parts }
Saddle supports

- E01D 19/16 . Suspension cables
Cable clamps for suspension cables; {Pre- or post-stressed cables }

- E01D 21/00 Methods or apparatus specially adapted for erecting or assembling bridges**

- E01D 21/06 . by translational movement of the bridge or bridge sections { ([E01D 15/127](#), [E01D 15/133](#) and [E01D 21/10](#) take precedence) }

- E01D 21/065 . . {Incremental launching }
- E01D 21/08 . by rotational movement of the bridge or bridge sections
- E01D 21/10 . Cantilevered erection
- E01D 21/105 . . {Balanced cantilevered erection }
- E01D 22/00** **Methods or apparatus for repairing or strengthening existing bridges {**
(electrochemical desalination or re-alkalisation [C04B 41/00](#)) ; Methods or apparatus for dismantling bridges }

Guide heading:**E01D 2101/00 Material constitution of bridges**

- E01D 2101/10 . Wood
- E01D 2101/20 . Concrete, stone or stone-like material
- E01D 2101/22 . . Masonry
Bricks
- E01D 2101/24 . . Concrete
- E01D 2101/26 . . . reinforced
- E01D 2101/262 with steel fibres
- E01D 2101/264 with glass fibres
- E01D 2101/266 with fibres other than steel or glass
- E01D 2101/268 Composite concrete-metal
- E01D 2101/28 prestressed
- E01D 2101/285 Composite prestressed concrete-metal
- E01D 2101/30 . Metal ([E01D 2101/26](#) takes precedence)
- E01D 2101/32 . . prestressed
- E01D 2101/34 . . non-ferrous, e.g. aluminium
- E01D 2101/40 . Plastics